

**Claims:**

1. In a cellular mobile telecommunications system, a method of charging for a call, comprising the steps of:

maintaining a record of channel usage for areas, each area comprising one or more cell sites and/or sectors in said system;

responsive to detection of a low occupancy of radio channels in an area, notifying mobile stations in said area that calls can now be originated and completed for a charge that is less than a normal charge for an originated call; and

making a billing record for a call for which the charge is to be lower, said billing record comprising information to allow a billing processor to make a lower charge for said call.
2. The method of Claim 1, wherein said lower cost is offered to only a subset of mobile stations served by said cellular mobile telecommunications system.
3. The method of Claim 2, wherein said subset is defined by a class of service.
4. The method of Claim 1, wherein said lower charge is turned on by a radio channel occupancy of said area that is below a first threshold.



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5. The method of Claim 1, wherein said lower charge is turned off for calls originated after said area reaches a radio channel occupancy above a second threshold.
6. The method of Claim 1, further comprising the step of:
  - a service provider defining cell sites and/or sectors and thresholds of said area.
7. A method of charging for a telecommunications call in a mobile cellular telecommunications system, comprising the steps of:
  - detecting a mobile station origination;
  - detecting that an area, comprising one or more cell sites and/or sectors from which said mobile station originates, has a channel occupancy above a first threshold;
  - making a billing record for a call for which the charge is to be higher, said billing record comprising information to allow a billing processor to make a higher charge for said call.
8. The method of Claim 7, further comprising the step of:
  - notifying a customer using said mobile station, of said higher charge.



9. The method of Claim 7, further comprising the step of:
- a service provider defining cell sites and/or sectors and thresholds of said area.
10. In a cellular mobile telecommunications system, a method of charging for a call, comprising the steps of:
- maintaining a record of channel usage for areas, each area comprising one or more cell sites and or sectors in said system;
- responsive to detection of a high occupancy of radio channels in an area, notifying mobile stations in said area that calls originated and completed will be subject to a higher than normal charge for an originated call; and
- making a billing record for a call for which the charge is to be higher, said billing record comprising information to allow a billing processor to make a higher charge for said call.
11. The method of Claim 10, wherein said higher cost is offered to only a subset of the mobile stations served by said cellular mobile telecommunications system.
12. The method of Claim 11, wherein said subset is defined by a class of service.



13. The method of Claim 10, wherein said higher charge is turned on by a radio channel occupancy of said area that is above a first threshold.
14. The method of Claim 10, wherein said higher charge is turned off for calls originated after said area reaches a radio channel occupancy below a second threshold.
15. The method of Claim 10, further comprising the step of:
  - a service provider defining cell sites and/or sectors and thresholds of said area.
16. In a cellular mobile telecommunications system, apparatus for charging for a call, comprising:
  - means for storing data specifying a number of radio channels available in an area;
  - processor means for controlling said mobile telecommunications system, and for making billing entries for calls on said system;
  - said processor means operative under the control of a program for:
    - detecting a low occupancy of radio channels in said area;



controlling notification of mobile stations in said area that calls can now be originated and completed for a charge that is less than the normal charge for an originated call; and

responsive to receipt of an originated call from one of the notified mobile stations, making a billing record for said originated call, said billing record comprising information to allow a billing processor to make a lower than normal charge for that call.

17. The apparatus of Claim 16, wherein said processor means are further operative under the control of said program for offering said lower costs to only a subset of mobile stations served by said cellular mobile telecommunications system.
18. The apparatus of Claim 17, wherein said processor means are operative under the control of said program for defining said subset of mobile stations by a class of service.
19. The apparatus of Claim 16, wherein said processor means are further operative under the control of said program for triggering said lower charge by detection of an occupancy of radio channels in said area that is below a first threshold.



20. The apparatus of Claim 16, wherein said processor means are further operative under the control of said program for turning off said lower charge for calls originated after said area reaches a radio channel occupancy above a second threshold.
21. The apparatus of Claim 16, wherein said processor means are further operative under the control of said program for defining cell sites and/or sectors, and thresholds of said area in response to data provided by a service provider.
22. In a cellular mobile telecommunications system, apparatus for charging for a call, comprising:
- means for storing data specifying a number of radio channels available in an area;
  - means for detecting a mobile station origination;
  - means for detecting that an area, comprising one or more cell sites and/or sectors from which said mobile station originates, has a channel occupancy above a first threshold; and
  - means, responsive to detection that said occupancy is above said first threshold, for making a billing entry for said origination that



comprises information to specify a higher charge than a billing entry made when said mobile station originates a call and said occupancy is below said first threshold.

23. The apparatus of Claim 22, further comprising means for notifying a customer using said mobile station of said higher charge.
24. The apparatus of Claim 22, further comprising means responsive to data provided by a service provider for defining cell sites and/or sectors and thresholds of said area.
25. In a cellular mobile telecommunications system, apparatus for charging for a call, comprising:
  - means for storing data specifying a number of radio channels available in an area;
  - processor means for controlling said mobile telecommunications system, and for making billing entries for calls on said system;
  - said processor means operative under the control of a program for:
    - detecting a high occupancy of radio channels in said area;



controlling notification of mobile stations in said area that calls now originated and completed will be subject to a higher than normal charge for an originated call; and

responsive to receipt of an originated call from one of the notified mobile stations, making a billing entry for said originated call, said billing entry comprising information to allow a billing processor to make a higher than normal charge for that call.

26. The apparatus of Claim 25, wherein said higher charge is imposed only on a subset of mobile stations served by said cellular mobile telecommunications system.
27. The apparatus of Claim 26, wherein said subset is defined by a class of service.
28. The apparatus of Claim 25, wherein said higher charge is triggered by a radio channel occupancy of said area that is above a first threshold.
29. The apparatus of Claim 25, wherein said higher charge is turned off for calls originated after said area reaches a radio channel occupancy below a second threshold.



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30. The apparatus of Claim 25, further comprising:

means responsive to data provided by a service provider for  
defining cell sites and/or sectors and threshold of said area.

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